



# Towards new mechanisms of innovation: How Latin America can become a R&D leader in the field of neglected diseases

**DNDi**

Drugs for Neglected Diseases *initiative*

Eric Stobbaerts – August 2014 - ICOPA

# A market failure



Pharmaceutical companies  
and the offer and demand  
market logic



R&D focus on  
developed region priorities

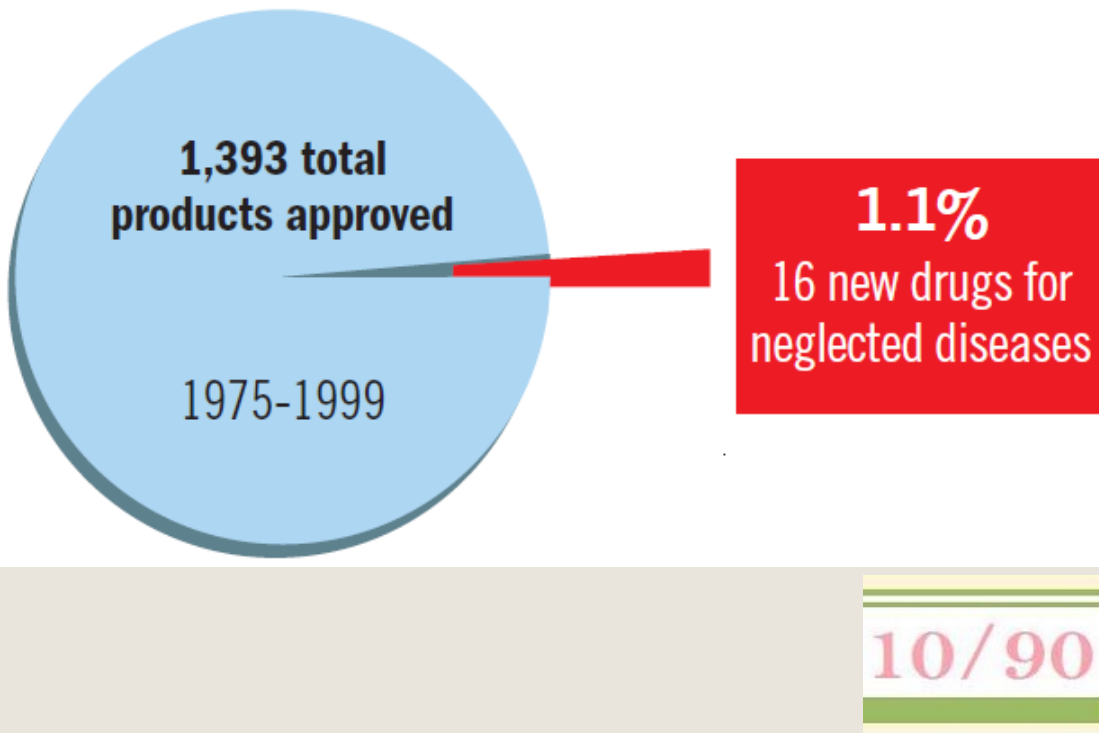


Result: the “90/10” R&D  
funding gap

# A Decade Ago: Research at a Standstill

## Fatal Imbalance for Neglected Diseases

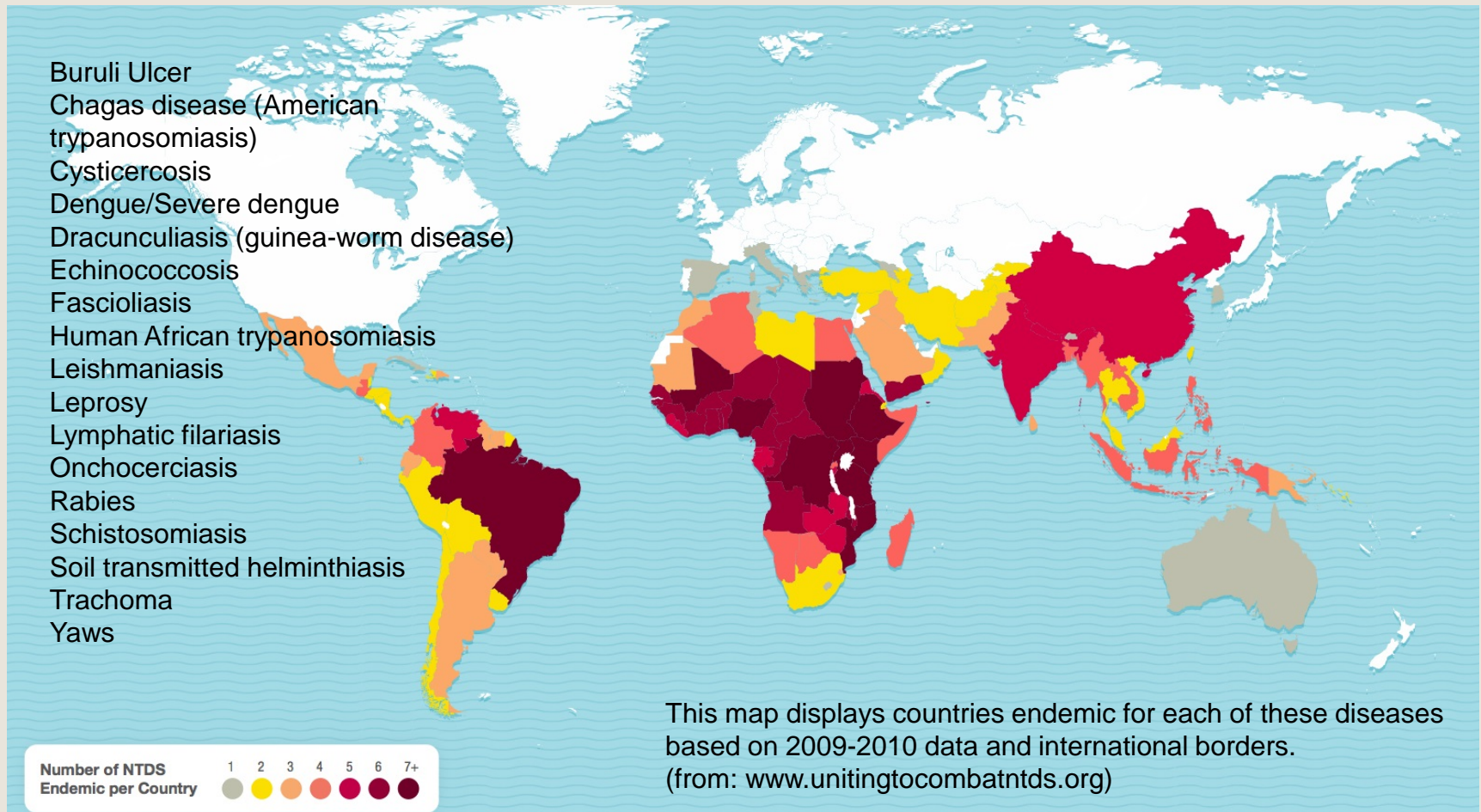
### Health R&D (1975 – 1999)



**A Fatal Imbalance** - from 1975-1999:

Approx. 10% of R&D dedicated to illnesses that affect 90% of global disease burden ('10/90 gap')

# Burden of Neglected Tropical Diseases



# Neglected diseases promote poverty

Nearly twice as many poor people are living in emerging economies than in low-income countries today

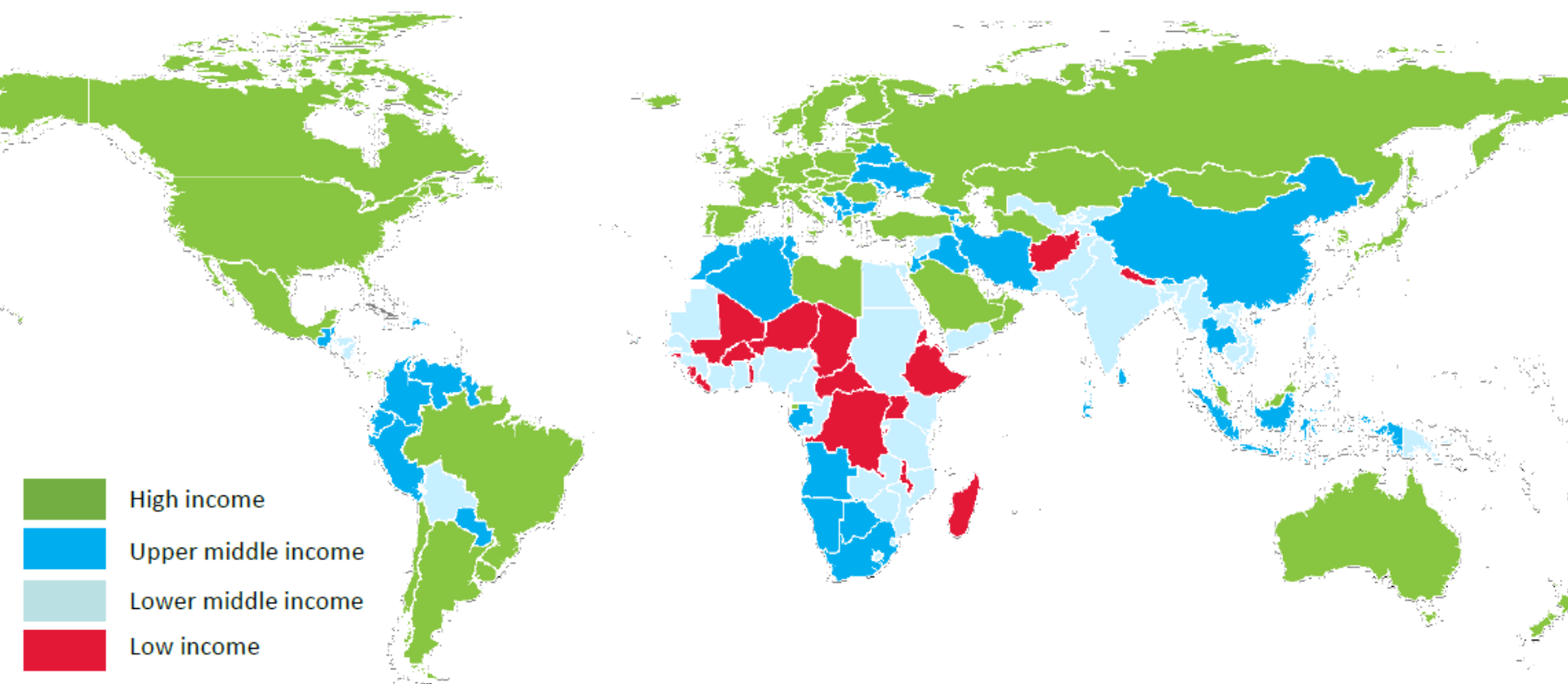
	Total population (in millions)	People living with less than 2\$ a day (in percentage)	People living with less than 2\$ a day (in millions)
Least Developed Countries	1000	74%	755
Emerging economies	4420	57%	1,536



# Economic growth is rapidly changing the world order

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2020



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Source: IMF data, extrapolated 2017-2020

# An opportunity to seize for Latin America science



How to build a R&D  
model with citizens  
and patients at the  
core

*Serafin Moreno*  
*Colombian miner*

# Public policies to boost innovation

R&D leadership and coordination led by LATAM

Political willingness and vision for neglected population

Open innovation to foster exchange and avoid duplication

Sustainable and adapted funding mechanisms

Favorable regulatory environments

Articulate Research capacities





# Seven cases to illustrate

# Case 1: Strengthening Research Capacities in Disease-Endemic Countries

## CHAGAS



## VL



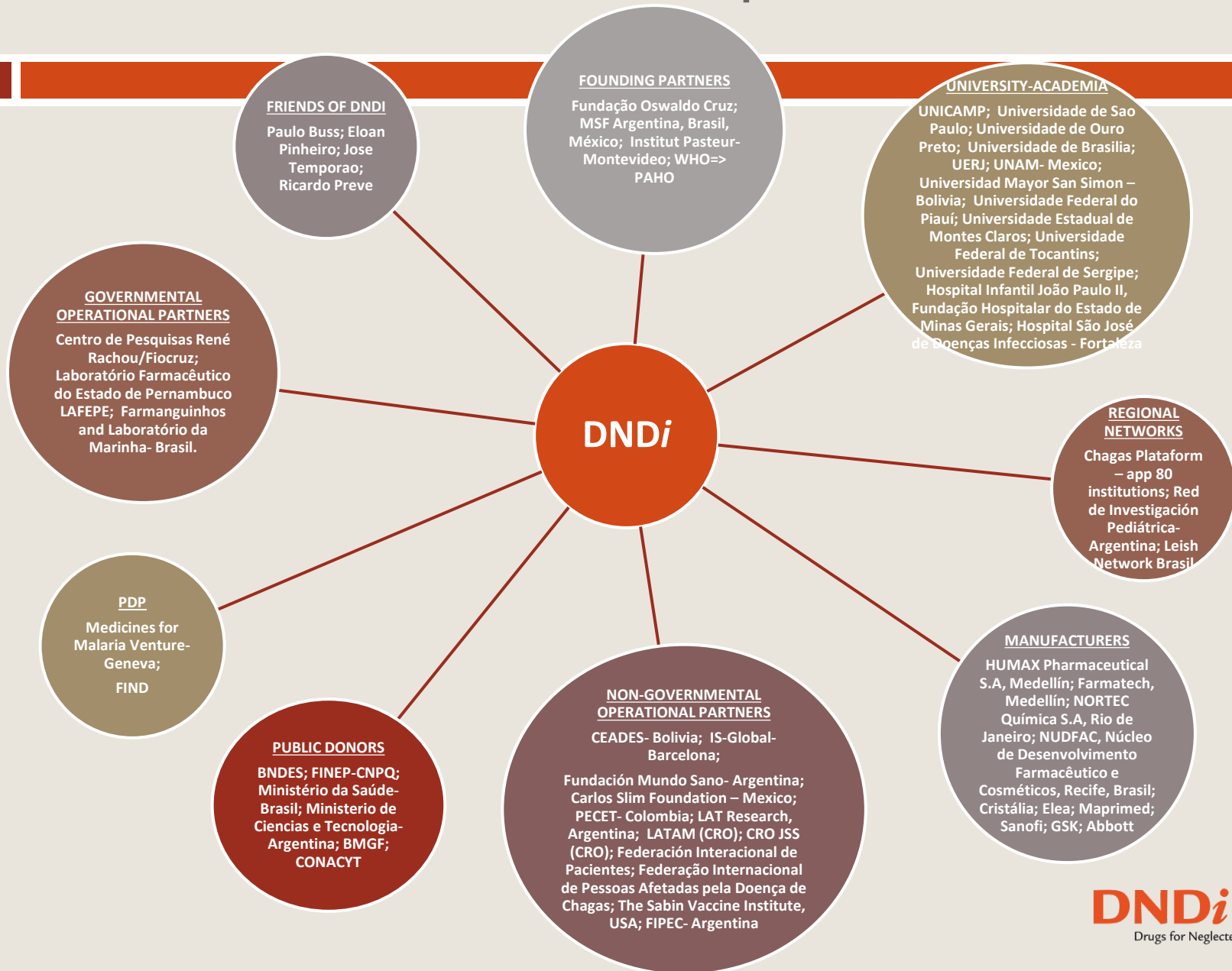
## HAT



## Regional Disease Platforms:

- ❑ Defining patients' needs and target product profile (TPP)
- ❑ Strengthening local capacities
- ❑ Conducting clinical trials (Phase II/III studies)
- ❑ Facilitating registration
- ❑ Accelerating implementation of new treatments (Phase IV & pharmacovigilance studies)

# Case 2: DNDi Partnerships in LA



# Case 3: Artesunate-Mefloquine Fixed Dose Combination: FACT Partnership

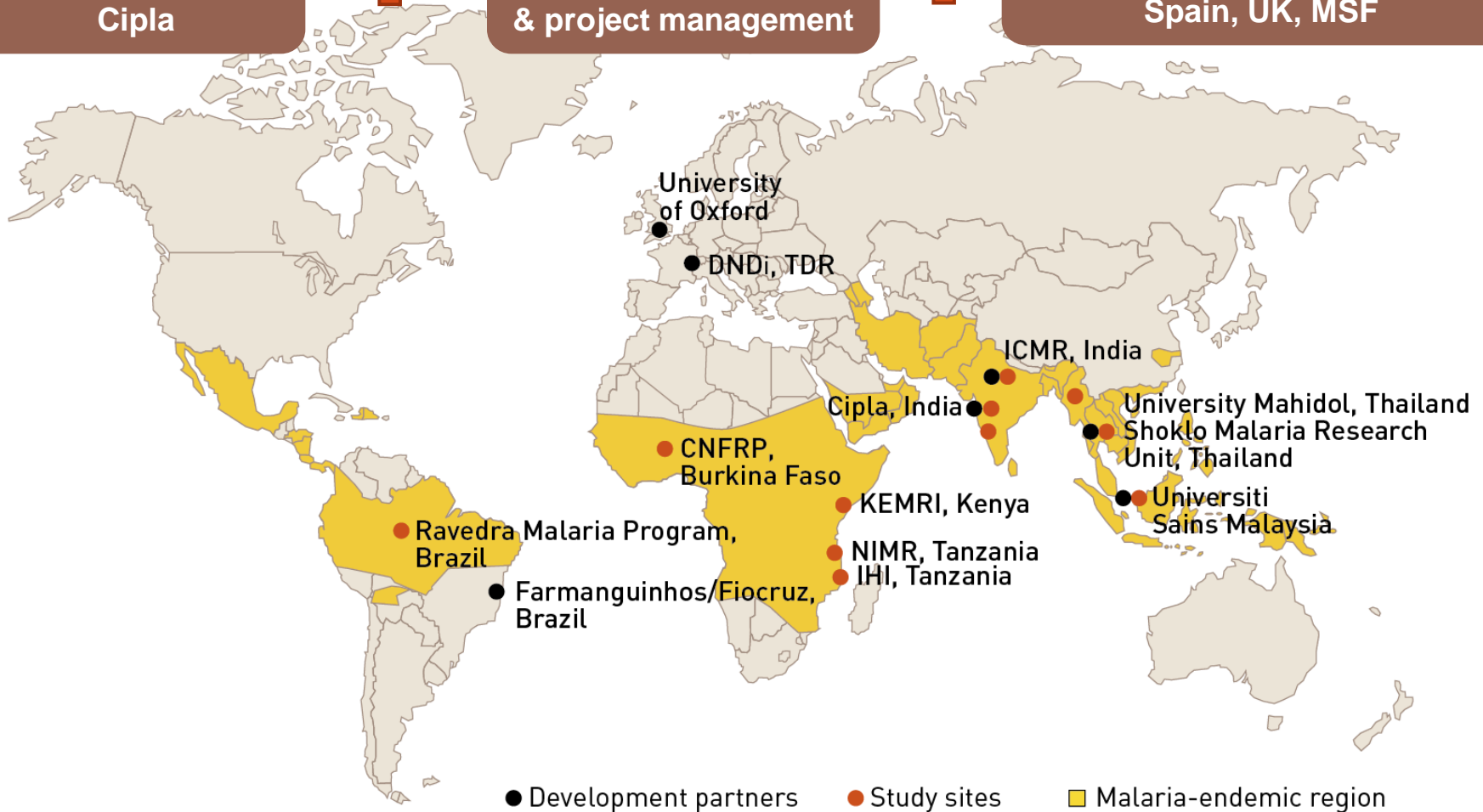
**Industrial Partners:**  
Farmanguinhos  
Cipla



**DNDi/TDR:**  
scientific coordination  
& project management



**Funding:** EU's INCODEV,  
FIOCRUZ, France, Netherlands,  
Spain, UK, MSF





# Case 4: Ruta N – Medellín, Colombia

Ruta N is a corporation created by the city of Medellín, academia and the industry to promote the development of innovative technology-based businesses that increase the competitiveness of the city and the region.



# Case 5: Mercosur Regulatory harmonization



- Promote and stimulate regional harmonization to aim accelerate scientific risk benefit
- Strengthen capacities of regulatory bodies in endemic countries as well as regional synergies

# Case 6: BNDES Subcrédito Social - Brazil

## Non-reimbursable Resources:

An existing mechanism through investments in social, educational, environmental, scientific and technological research.



# Case 7: Sustainable and transformative initiatives



MundoSano

**Argentina and Spain**

FUNDACIÓN

*Carlos Slim*

**México**

**Instituto | Azzi**

Criando Valores

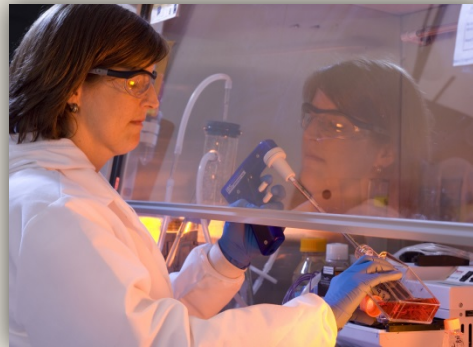
**Brazil**



# Vision for tomorrow

The Chagas R&D Accelerator Initiative: a coordination mechanism for accelerating the development of new health tools for Chagas disease—a possible regional response to World Health Assembly resolution 66.22

- **The Coordination Initiative:** representatives of the scientific community, key Latin American governments, PAHO/WHO, TDR, DNDi, treatment providers, (FINDECHAGAS), supported by a secretariat. Agree priority project, TPP's, funding needs incentives and policies.
- **Precedent within region :** countries in Latin America can collaborate on funding and R&D priorities applying open innovation principles contained in CWEG



# Chagas Accelerator

- ❑ **Open knowledge and innovation policy:** Institutions, companies and researchers sign a formal agreement ensuring open knowledge sharing, and data transparency and publications of results
- ❑ **Funding:** pull public and private funding into a virtual fund to support priority projects. Possibility of refocusing existing funding on R&D (e.g BNDES).
- ❑ **Promote and support new incentive mechanisms:** e.g Milestone prize
- ❑ **Equitable access and delinkage policy:** products developed as public goods, with affordable pricing, registered in all endemic countries
- ❑ **Towards a Regional TPP:** building on existing platforms and promising R&D projects:
  - ❑ New PCR diagnostic kit , Laboratory validation of selected biomarkers, at least one new biomarker validated for use in clinical trials, Biobank portal, Proof of concept of alternative treatment regimens of existing drugs in monotherapy or in combination, Proof of concept of a new chemical entity (NCE), at least one new treatment option available and adopted within 5 years, and sustained diagnostic and treatment scale-up in Latin America...

# Conclusion

A unique opportunity for the rise of Latin America, by solving old problems with innovative new solutions



A group of five children are running and playing in front of a rustic building with a thatched roof and a wall of peeling white plaster. The children are smiling and appear to be in motion. The girl on the left is wearing a striped tank top and green shorts. The boy next to her is shirtless and wearing blue shorts. The boy in the center is wearing a grey t-shirt and light-colored shorts. The boy on the right is shirtless and wearing light-colored shorts. The girl in the middle is wearing white underwear. The background shows a dirt area and some greenery.

**Santiago del Estero, Argentina**

João Roberto Ripper, 2009

**THANK YOU**

[www.dndial.org](http://www.dndial.org)